Electronic Version
Stylesheet Version v1.1.1

Claims

[c1] A set of N-1 sections of coaxial transmission line whose lengths are defined by the equation L= Lambda*(A + .5*B + M/(2*(N-1)) - .25) where L is a nominal section length, Lambda is the wavelength at the design operating frequency of the coaxial transmission line. A is an integer chosen to make the lengths practical for manufacturing. Typically A=1. B is an integer chosen to make the lengths practical for manufacturing. Typically B=0. M is a range variable that varies from zero to N-2. N is an integer determined by the equation N=(J/K)-1 where J is the number of same length sections in an existing transmission line run. K is an integer. Typically K=3.

[c2] A set of N-1 sections of coaxial transmission line whose lengths are defined by the equation L= Lambda*(A + .5*B + M/(2*(N-1)) - .25) where L is a nominal section length, Lambda is the wavelength at the design operating frequency of the coaxial transmission line. A is an integer chosen to make the lengths practical for manufacturing. Typically A=1. B is an integer chosen to make the lengths practical for manufacturing. Typically B=0. M is a range variable that varies from zero to N-2. N is an inte-

ger determined by the equation N=(J/K)-1 where J is the number of same length sections in an existing transmission line run. K is an integer. Typically K=3.

[c3] A set of N-1 sections of coaxial transmission line as set forth in claim 2 inserted into an existing transmission line run comprising J sections of the same length in order to prevent the constructive addition of reflections from the joints of the resulting combined transmission line resulting in low VSWR characteristics at the design operating frequency.

[c4] A set of N-1 sections of coaxial transmission line as set forth in claim 2 inserted into an existing transmission line run comprising J same length sections such that K same length sections are installed between each of the N-1 variable length sections. Typically K=3.

[c5] A coaxial transmission line run as set forth in claim 4 having low VSWR characteristics over a wide band of frequencies centered at the design operating frequency.